

# POTENTIAL OF ALTERNATIVE PROTEIN SOURCES FOR EXOTIC CARNIVORES: OBSERVATIONS AND DISCUSSION

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## ABSTRACT

Historically, the zoological community has depended on horsemeat and beef as the two options for feeding exotic carnivores. Horsemeat was generally preferred by veterinarians and nutritionists as a leaner, more wildgame-like product. Unfortunately, within the last 10 years all horsemeat packing plants in the US have closed due to public pressure opinion that horses are more pets than livestock and should not be slaughtered. This situation has severely impacted commissary supply operations by forcing zoos to either switch to beef, purchase horsemeat from outside the United States, and/or purchase non-USDA regulated product. This, in and of itself, has been a problem, yet now beef supplies are declining, prices are rising, and facilities with carnivores are backed into a smaller corner with less choice. The AZA lists four major suppliers of carnivore meat: 2 provide horsemeat, 1 provides beef, and one supplies both. There are other reputable companies that offer beef/horse and are not on this list; smaller, local companies can be difficult to find and this is where discussion amongst zoos can be extremely beneficial.

In addition to exploring other opportunities for beef/horse, there is increasing interest and availability in other types of meat. Pork, elk, deer, and bison are all meats that are typically leaner than beef, not as controversial as horse, and becoming more mainstream. Most large vendors are able to easily obtain cuts of these game meats as restaurants and grocery stores offer more variety. Despite the huge benefit of being able to offer this variety for our carnivores, these are still straight muscle meat with incomplete nutritional profiles. Currently, there are no major companies that provide alternative nutritionally complete meat products. Brookfield Zoo has been involved in examining the palatability, cost, and nutritional appropriateness of a new pork product developed by a Chicago company. The product has been offered to all obligate carnivores in the collection with approximately 75% success; sensitive animals that had GI concerns or were not eating well had 100% success in resolving the issues. The opportunity to use more than one type of meat product and have a choice provides more peace of mind to an animal caregiver and is more representative of a natural diet.

Utilization of alternative species for carcass parts is becoming more accessible and tends to be accepted by different species. We have recently begun offering bison and elk legs (from the elbow or knee down) complete with hooves and hair to our canines and bears with great success. The big cats did not find them as appealing. The exhibition of natural behaviors with this type of food item is more important than any nutritional value. Being by-products of production, they can be obtained at reasonable prices.

This discussion aims to increase the flow of information about alternative meat products and companies available for zoos to use. Successes and failures with alternative/game meat products are also an important topic to explore as beef prices continue to rise.